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MONTHLY LETTER OF THE BUREAU OF ENTOMOLOGY
UNITED STATES DEPARTMENT OF AGRICULTURE.

Number 45.

January, 1918.

BUY
UNITED STATES GOVERNMENT WAR-SAVING STAMPS.

WHY WE ARE AT WAR

HE IS BLIND WITH PREJUDICE OR IGNORANCE WHO DOES NOT NOW SEE THAT FROM THE BEGINNING OF THE WAR, GERMANY CONTEMPLATED AN ASSAULT UPON THE UNITED STATES AFTER SHE HAD COMPLETED THE DESTRUCTION OF FRANCE AND ENGLAND. SUCH A COMBAT WAS INEVITABLE SOONER OR LATER, FOR WIDE AS ARE THE SEAS THAT LIE BETWEEN AND VAST AS ARE THE UNSETTLED SPACES OF THE EARTH, THERE IS NOT ROOM ENOUGH ON THIS LITTLE PLANET FOR TWO SUCH ANTAGONISMS OF POLITICAL AND MORAL PURPOSE AS GERMAN ALLMACHT AND AMERICAN INDEPENDENCE" (Hon. Clarence Ousley, Assistant Secretary of Agriculture, in address at St. Louis, Mo.)

WANTED!

WANTED: IMMEDIATELY: SIX THOUSAND ADDITIONAL MEN TO BRING THE TWENTIETH ENGINEERS (FOREST) REGIMENT TO FULL STRENGTH! APPLICANTS FOR ENLISTMENTS MAY APPLY BY LETTER TO THE "FORESTER, WASHINGTON, D. C.," OR TO THE VARIOUS LISTING OFFICERS.

POSSIBLE EFFECT OF THE PRESENT COLD WINTER UPON CROP DAMAGE
BY INSECTS NEXT GROWING SEASON.

The present winter in Washington has been by far the most severe of the forty consecutive winters which I have spent in this city. This severe cold has been very general east of the Mississippi River. Observations already made indicate that the unusually low temperatures have killed an enormous number of hibernating boll weevils. As the season advances, these unusual conditions will undoubtedly be seen to have had some effect upon other injurious insects. It becomes, therefore, important for all field workers, with the unusual winter in mind, to make close observations upon all of the prominent species, in order to determine the effect of the cold. We should be able to accumulate in the Bureau in this way many significant data. [L. O. H.]

CAMP LIBRARIES.

As a result of the million dollar campaign for books for the American soldiers the American Library Association has already sent more than half a million to the training camps and to France, has erected a complete library building in every cantonment but one, where local conditions have delayed the work, and has placed trained men in charge of these libraries. Buildings are in course of construction at sixteen National Guard camps and at two special camps. Of the 500,000 books sent to the soldiers by the Association only 100,000 were purchased—the rest were gifts. The policy of the Association is to look to donors for fiction and miscellaneous light reading and to spend the money it has raised on more serious books. The Association will not attempt to administer directly the books it will send to France. This work will be handled by the Young Men's

1. **BLT**
2. **Caron** **2000**
3. **Whey** **2000**
4. **Teal** **2000**
5. **Flax** **2000**
6. **Gluten** **2000**
7. **Wheat** **2000**
8. **Barley** **2000**
9. **Flax** **2000**
10. **Wheat** **2000**

Christian Association, the Knights of Columbus and the Red Cross, since it is felt that the money it would take to erect buildings in France and the pay the necessary force would be better spent on books. Headquarters of the Association are now at the Library of Congress, Washington, D. C., whose librarian, Dr. Herbert Putnam is director of American Library Association's war service, and from now on the books will go forward in increasing volume. [Official bulletin January 21, 1918]

CHANGE IN THE ADMINISTRATION OF THE BUREAU PRINTING FUND.

Hitherto the printing fund for this Bureau has been apportioned among the several sections both in respect to the general printing fund and the Farmers' Bulletin fund. This arrangement has not worked out well in practice nor has it been adhered to. A new plan has therefore been devised to secure a better administration and utilization of these funds. The apportionment of these funds among the several sections of the Bureau will be discontinued and the sums will be held as two lump sums. As completed manuscripts are presented for printing the Advisory Committee of the Bureau will consider these manuscripts and fix for the approval of the Chief of Bureau the order of submittal for publication. Such consideration on the part of the Bureau as a whole through the Advisory committee is for the purpose of securing more prompt publication of manuscripts for which there is immediate need and in the end should facilitate rather than check the publication of all manuscripts which should be printed.

TRANSFER OF EMPLOYEES FROM EXECUTIVE DEPARTMENTS TO INDEPENDENT ESTABLISHMENTS AND VICE VERSA PROHIBITED.

"That section five of the act of June 22, 1906, prohibiting the transfer of employees from one executive department to another, shall apply with equal force and effect to the transfer of employees from executive departments to independent establishments and vice versa and to the transfer of employees from one independent establishment to another: PROVIDED, That the United States Shipping Board Emergency Fleet Corporation shall be considered a Government establishment for the purpose of this section."

TRANSFER OF EMPLOYEES FROM ONE DEPARTMENT TO ANOTHER AT AN INCREASED RATE OF COMPENSATION PROHIBITED.

"That no civil employee in any of the executive departments or other Government establishments, or who has been employed therein within the period of one year next preceding his proposed employment in any other executive department or other Government establishment, shall be employed hereafter and paid from a lump-sum appropriation in any other executive department or other Government establishment at an increased rate of compensation. And no civil employee in any of the executive departments or other Government establishments or who has been employed therein within the period of one year next preceding his proposed employment in any other executive department or other Government establishment and who may be employed in another executive department or other Government establishment shall be granted an increase in compensation within the period of one year following such reemployment: PROVIDED, That the United

States Shipping Board Emergency Fleet Corporation shall be considered a Government establishment for the purpose of this section: PROVIDED FURTHER, That this section shall not be construed to repeal section five of the act of June 22, 1906, which prohibits the transfer of employees from one department to another."

HESSIAN-FLY CONFERENCE.

A conference was held January 5, 1918, at Washington, D. C., for the purpose of discussing the Hessian fly situation in relation to present agro-nomic practice. The following persons were in attendance:

BUREAU OF ENTOMOLOGY.

Doctor L. O. Howard.
W. R. Walton.
J. J. Davis.
W. R. McConnell.
O. M. Packard.
A. F. Satterthwait.
C. N. Ainslie.
G. G. Ainslie.
C. W. Creel.
J. R. Horton.
J. S. Wade.
W. J. Phillips.
D. J. Caffrey.

BUREAU OF PLANT INDUSTRY.

C. R. Ball.
M. A. Carleton.
C. V. Piper.
C. S. Scofield.
C. E. Leighty.

As a result of this conference it was decided to issue a questionnaire, addressed to Extension Directors of several winter wheat producing States, for the purpose of securing information upon which to base action with a view to securing the plowing under of stubble immediately after harvest wherever this practice can be followed without financial loss to the farmer.

At the close of the general conference, the Hessian fly men met to discuss Hessian fly plans for the coming year. At the end of this meeting a committee composed of Messrs. J. J. Davis, W. R. McConnell, and J. R. Horton, was appointed to prepare an outline of the methods to be used in the Hessian fly investigations for the coming year in order that uniformity along certain important lines might be secured. This report stated briefly is as follows:

METHODS OF MAKING COUNTS. In the experimental plots, records should be secured by examining not less than five linear yards of drill row, each yard to be taken at random from a different section of the plot and every plant in the selected yard to be examined. Record should be made of the total number of plants examined, the number infested, the stage of development, and any other desirable data, as well as a record of the width of drill rows in order that the number of plants and insects per acre can be calculated. This method was selected in preference to the picking method because, from the results obtained by Flint and Davis, it seemed to give practically equally satisfactory results, and the former method was more adaptable for making counts in both fall and spring, as well as in stubble, making it possible to have results of all counts comparable and to correlate results with

for the vegetation and
the soil conditions of
the field - nothing is
so difficult as good
"reliability".

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John C. Smith	35	M	123 Main Street
John D. Smith	35	M	123 Main Street
John E. Smith	35	M	123 Main Street
John F. Smith	35	M	123 Main Street
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John J. Smith	35	M	123 Main Street
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John X. Smith	35	M	123 Main Street
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area. No definite, uniform method of determining percentages of infestation in scouting work was recommended. Where accurate percentages are desired the above method or the picking method is suggested, but, owing to the necessity of covering considerable territory as rapidly as possible and the practical need of securing the degree of infestation, only in approximate figures, it was considered best to permit individuals to use any reliable method of determining the general infestation with which they were most familiar.

It was planned to determine yield by taking one five-thousandth of an acre in five different places in the plot (total of one one-thousandth acre) to be secured by taking squares of approximately one square yard. In at least one place total plots will also be cut and threshed to determine the reliability of the smaller areas in comparison.

INSTRUMENTS. The meteorological instruments to be used at the large ten-acre experimental plants shall be as follows:

- Hygrothermograph and Sling Psychrometer.
- Soil Thermograph.
- Two or three Soil Thermometers.
- Set of Maximum and Minimum Thermometers.
- Rain Gauge.
- Anemometer.
- Wind Vane.
- Barometer.

In addition, the use of atmometers and radiation thermometers at the Lafayette station will be continued another year.

CAGES AND SCREENS. The box cage, consisting of a frame one yard square and eighteen inches high, covered with black cloth, wood or roofing material, and with a trap to collect issuing flies, seems the most desirable for determining the normal fly emergence. Further studies should be made to obtain a cage which will be reliable in showing the natural emergence of flies and which will be practical for use by county agents and others. Studies should also be made to determine whether stubble gathered from the field and placed in a cage such as described above will produce flies as normally as in the field.

Screens made of ordinary wire fly screen are also to be used in determining the periods of emergence. These screens shall be two in number and each shall be three feet high and ten feet long, set about six or eight inches from the ground and placed north and south and east and west respectively. These screens to be covered with tanglefoot suitably thinned and examined at least once daily for flies. Our experience indicates that one daily examination is sufficient.

EXPERIMENTS. The experiments planned for certain stations in the Hessian-fly-infested area shall consist of one or more series of sowing plats and one major plat of approximately ten acres. At the latter plat experiments shall be conducted to determine proper sowing dates and the relation of fertilization to Hessian fly control, variety tests, effect of various kinds of cultivation on the emergence of the fly and the effect of different dates of plowing on the following wheat crop, and the relation to fly control. In addition, a complete set of meteorological instruments described above shall be in operation at the major plat and studies on the different phases of the life history of the fly made to determine the relation of the various meteorological influences.

It is desirable that "flaxseeds" from each series of sowing plats be

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collected, separated from the stubble, and placed in rearing cages to determine the percentage of total parasitism.

It was the unanimous opinion of those attending the meeting that the plowing down of wheat stubble immediately after harvest as a control measure for the Hessian fly is absolutely necessary in order to gain satisfactory control of the insect.

THE COLLECTION OF HEMIPTERA.

E. H. Gibson, Custodian of Hemiptera at the National Museum, proposes to carry on what might be termed a "clearing house" for additions, corrections, emendations, etc., of Van Duzee's recently published catalogue of the Hemiptera of North America and he suggests that entomologists noting omissions or errors in the catalogue communicate with him. From time to time tabulations of such corrections will be made and sent out in the form of a circular letter to any one interested in the subject. (E. H. Gibson.)

LIBRARY.

Miss Mabel Colcord, Librarian.

NEW BOOKS.

Agricultural, conference, Malaya: Proceedings ... 1st... Chamber of Commerce, Kuala Lumpur, April 25 to 28th, 1917...Ed. by L. Lewton-Brain and B. Bunting. - Page 64-74, Diseases and pests of the cocoanut palm by R. M. Richards. - Page 75-85, History and present position of white ant treatment in Malaya, by P. B. Richards. - Page 86-94, Application of the Agricultural pests enactment, by F. W. South.

Bastin, Harold: British insects and how to know them. London, 1917. 12pp. 12pl.

Beebe, W. H., Hartley, G. I. and Hawes, P. G: Tropical wild life in British Guiana...with an introduction by Theo. Roosevelt. New York, Jan. 1917. v.1 [504p]. illus.. col. pl. Part III Entomological, by Paul G. Hawes, p. 271-499.

Mason, H. W. Boll weevil extermination. [Louisville, Ky., 1917] 16p. illus.

Metcalf, Z. P. Insect pests and plant diseases. In The rural efficiency guide v.3, by C. C. Williams, L. L. Rummell and Z. P. Metcalf. Cleveland, Ohio, 1918, p. 213-368, 193 figs.

Misra, C. S. The Indian sugar cane leaf-hopper, *Pyrilla aberrans* Kirby. Calcutta, London, 1917. 133 [3]p. illus., plates. (India. Dept. agr. Memoirs. Ent. ser. v.5, no. 2)

Nawa, Yasushi, A collection of essays for Mr. Yasushi Nawa, written in commemoration of his sixtieth birthday, October 8, 1917. Gifu, Japan, 1917. 194p. illus., 13 pl.

Shipperson publishing company, New York, N. Y. Cotton facts, a compilation from official and reliable sources of the crops, receipts, exports, stocks, home and foreign consumption, visible supply prices, and acreage of cotton. New York, 1917. 239p.

Thompson, Caroline B. Origin of the castes of the common termite, *Leucotermes flavipes* Kol. Reprint from Journal of morphology, v.30, no. 1, p. 83-136, 8 pl. Dec. 1917. Bibliography, p. 134-136.

Wheeler, W. M. The Mountain ants of western North America. IN American acad. arts and sciences. Proc. v.52, p. 455-569, Boston, 1917. (Contribution from the Entomological lab. Bussey institution Harvard Univ. 118) Bibliography, p 563-569.

BEE CULTURE

E. F. Phillips, Apiculturist in Charge.

E. W. Atkins attended the meeting of the Kansas Beekeepers' Association at Topeka on January 7-8 and that of the Missouri Apicultural Society on January 15-18. He will remain in Missouri throughout February.

A. F. Atwater left California to work in Arizona from January 14 to 26 and then leaves for two weeks in New Mexico, after which he will return to California.

C. E. Bartholomew attended Farmers week at Ft. Collins January 14-19 at which time the Colorado Beekeepers' Association met. He will work in Colorado during February.

Geo. S. Demuth attended the meeting of the New Jersey Beekeepers' Association at Trenton, January 24-25.

Morley Pettit, formerly lecturer in beekeeping at the Ontario Agricultural College was in Washington January 1-2.

P. W. Erbaugh spent the month of January in Michigan and will then go to Ohio.

David Running began work in New York but has been compelled to resign because of illness.

J. H. Wagner has resigned, effective January 15.

Ward H. Foster of Colorado has been appointed and has left for work in Washington, Oregon, and Montana.

G. C. Matthews left Wisconsin on January 20 and will remain for a time in Minnesota.

Geo. S. Demuth attended the meeting of the North Carolina Beekeepers' Association at New Berne on January 10.

Arrangements are being made for a series of meetings in California beginning March 1st to be conducted by Messrs. Demuth and Atwater assisted by state men. These will deal entirely with the bee disease situation in California which is acute.

E. F. Phillips will attend the Tennessee Beekeepers' Association meetings at Nashville, February 1st.

E. L. Sechrist left January 26 for Ohio to conduct extension work in that state.

SOUTHERN FIELD CROP INSECT INVESTIGATIONS.

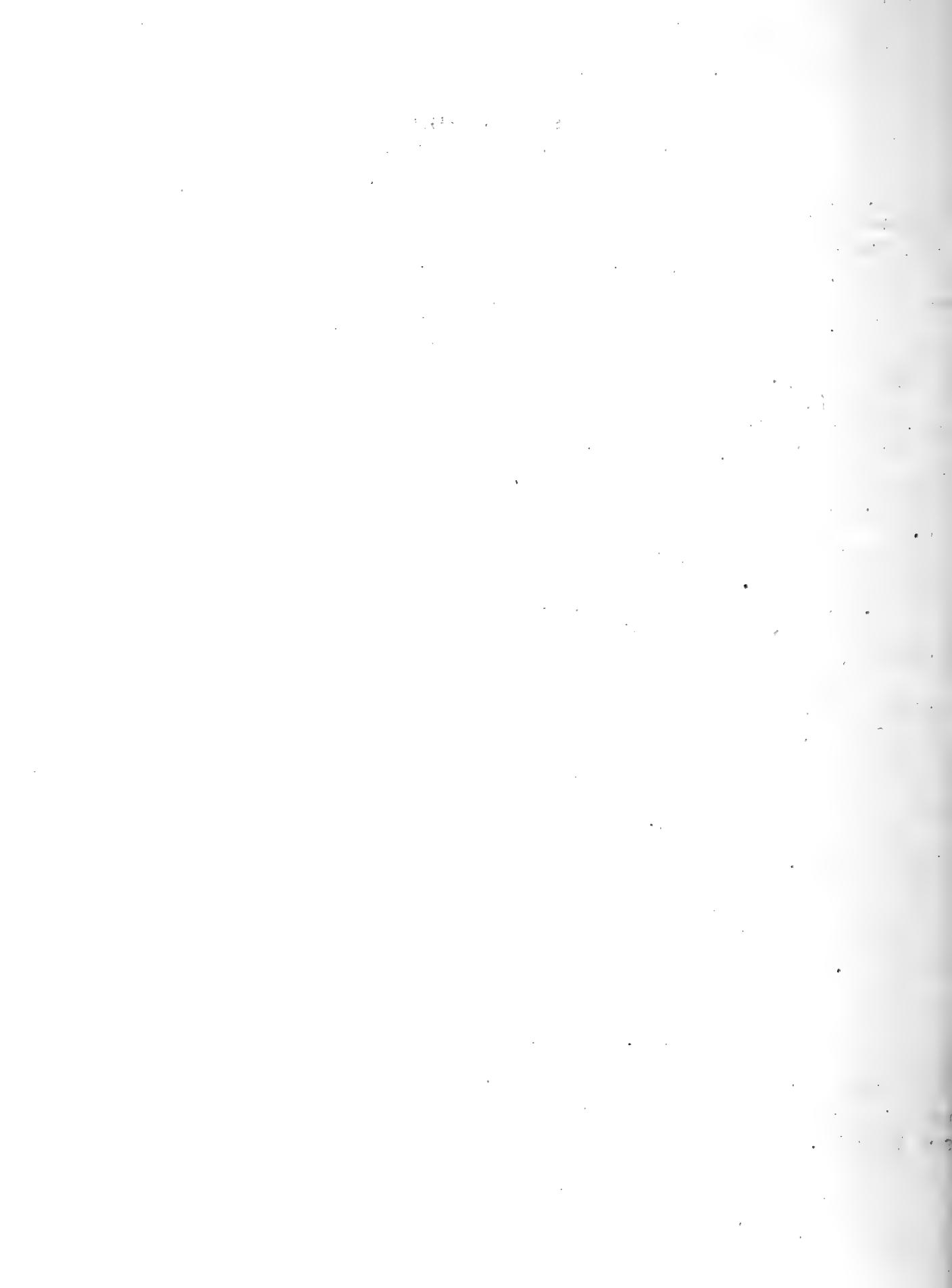
W. D. Hunter, Entomologist in Charge.

Doctor Hunter who has been spending the greater part of his time in Texas supervising the work of controlling the pink bollworm was in Washington from January 7 to 15.

T.E. Holloway arrived in Washington on January 7 and remained for one week.

F. C. Bishopp spent ten days in Washington from January 2 to 12.

J. D. Smith, formerly employed by the Bureau and the Georgia State Board of Entomology at Valdosta, Georgia, has been transferred to the Deciduous Fruit Insect Investigations with headquarters in Washington.



G. D. Smith was in Washington from January 21 to 26. He returned to Madison, Florida, January 31.

F. S. Chamberlin spent the first fifteen days of January at his home Framingham, Mass., but has returned to Clarksville, Tenn.

D. L. Van Dine has been commissioned first lieutenant in the Sanitary Corps of the War Department.

T. C. Barber has been transferred from the Federal Horticultural Board to the Bureau to work on sugar-cane insects with headquarters at Audubon Park, New Orleans, La.

U. C. Loftin has been transferred from the Bureau to the Federal Horticultural Board for work on the pink bollworm in Texas and Mexico. He was in Washington from January 2 to 15.

DECIDUOUS FRUIT INSECT INVESTIGATIONS.

A. L. Quaintance, Entomologist in Charge.

Joseph D. Smith, formerly employed under the direction of Dr. W. D. Hunter and the Georgia State Board of Entomology, has been transferred to this office and will be engaged in insecticide studies, with headquarters at Washington, D. C.

H. K. Plank, who made a trip of inspection of the cranberry bogs of Oregon and Washington in company Dr. A. L. Melander, of the Washington Agricultural College and E. J. Newcomer, of this office, is now in Washington preparing reports on his field investigations.

B. A. Porter, who was temporarily transferred to the Federal Horticultural Board in connection with pink bollworm work, has been reinstated in this office and is now in Washington preparing notes, etc., in connection with his investigations of parasites of deciduous fruit insects.

A. J. Flebut, who has been in charge of the Bureau's work on chestnut weevils, with headquarters at Paxinos Pa., has been granted an indefinite furlough for the purpose of entering the Officers Training Camp at Camp Upton, N. Y.

John B. Gill, who has been temporarily in Washington preparing reports in connection with pecan insect investigations, has returned to his headquarters at Monticello, Fla.

H. G. Ingerson, who has been temporarily in Washington preparing reports on the results of his investigations of the grape berry moth in the Ohio grape belt, has now returned to his headquarters at Sandusky, Ohio.

FEDERAL HORTICULTURAL BOARD

C. L. Marlatt, Chairman.

The proposed sweet potato and yam quarantine as to foreign countries, referred to in the November number of this publication, was approved and promulgated by the Secretary of Agriculture December 18, 1917, effective January 1, 1918, and is therefore now in force. It prohibits the importation for any purpose of any variety of sweet potato or yams (*Ipomoea batatas* and *Dioscorea* spp.) from all foreign countries and localities. This quarantine, however, does not apply to the territories of Hawaii and Porto Rico. Covering these two territories a domestic quarantine has been issued of the same date, effective January 1, forbidding the movement of sweet potatoes or yams of any variety from these Territories into or through any other Territory, State, or District of the United States.

THE PINK BOLLWORM SITUATION.

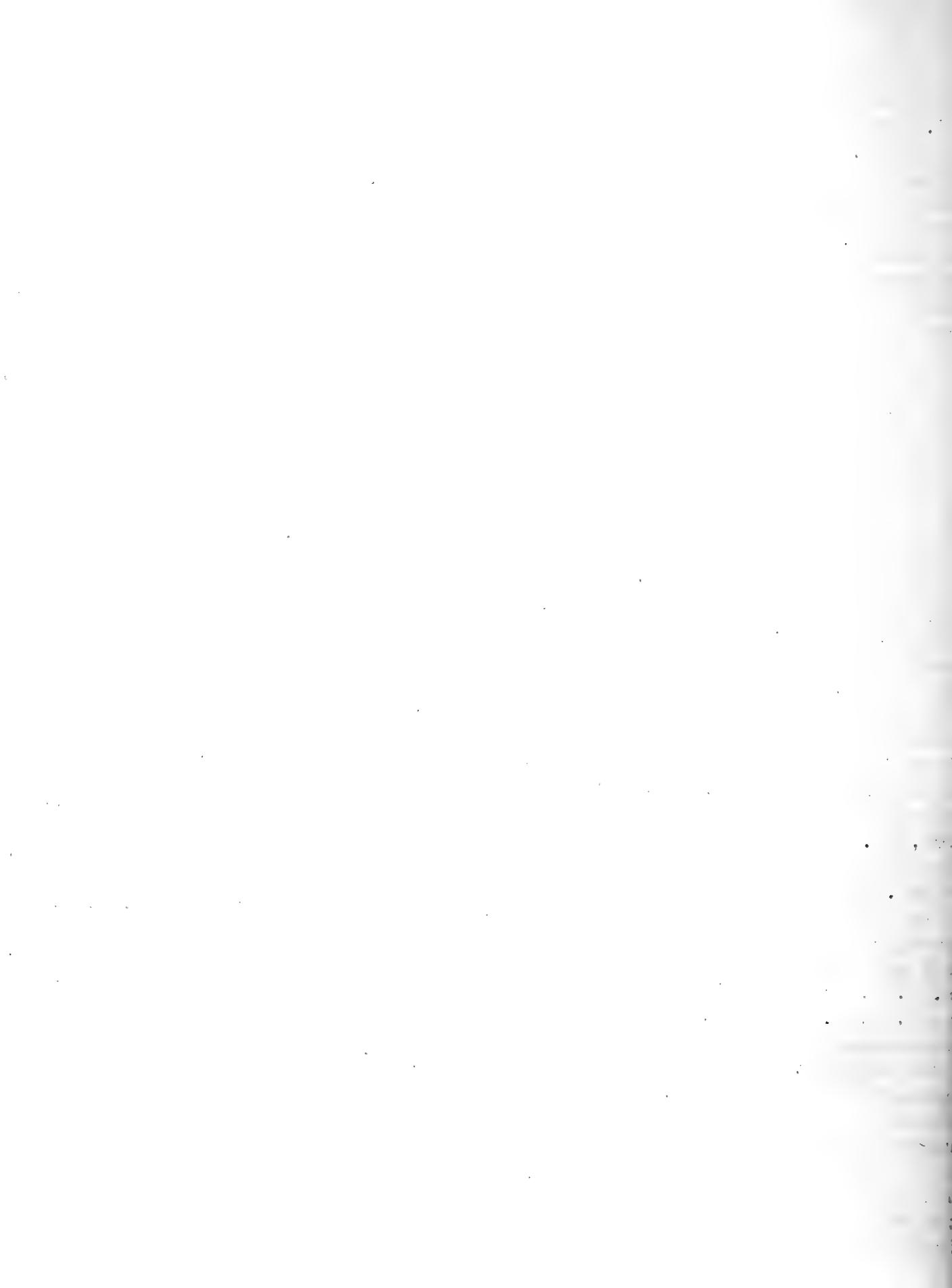
No new outbreak of the pink bollworm has been determined in Texas but the Trinity Bay region has developed infestation pretty well surrounding the bay, involving altogether an area of between 6,000 and 7,000 acres of infested cotton land. Between 3,000 and 4,000 acres of this infested land have already been cleaned up. The control also extends to provision for the supervision and prompt milling of all seed from the infested fields and the shipment to Galveston for export of all lint cotton. The technical force under Doctor Hunter comprises some 40 experts engaged in the inspection and field surveys and the direction of the field clean-up labor force. This last varies from several hundreds to upwards of a thousand men. The clean-up of the infested territory will be fairly well completed by the end of January. The State of Texas already has established a regulatory quarantine covering the area and it is expected that the official order declaring a cotton-free zone will be shortly promulgated. It is proposed to have this zone extended at least 10 miles beyond the outlying points of infestation. The quarantine and free-zone features are State matters and are being strongly supported by the State authorities. The State Extension Service is also assisting with a force of men doing educational work with respect to the planting of such substitute crops as peanuts, soy beans, sugar cane, etc.

A meeting of the entomologists of the southern States was held at Houston January 18-19, and passed resolutions approving and commending the prompt and efficient action taken by the Federal and State authorities for the suppression of the pink bollworm in Texas and for preventing its further distribution not only within the State of Texas but also in other cotton-growing States.

A supplemental estimate of an appropriation of \$500,000 to cover the pink bollworm work for the fiscal year 1919 has been added to the agricultural appropriation bill as reported to the House from the Committee on Agriculture. This is a reduction from the estimate of \$800,000 submitted by the Department of Agriculture. Under this appropriation the following items of work are provided for: Border control work, \$50,000; Survey in Mexico, \$25,000; Research station in the Laguna, \$25,000; Survey and clean-up work in Texas, including the establishment of cotton-free zones, clean-up of infestations in Mexico, etc., \$400,000.

Doctor Hunter was in Washington for a week about the middle of the month. Messrs. Busck and Loftin are probably now in the Laguna to take up active work in connection with the research station. They were accompanied by Mr. H. C. Thompson of the Bureau of Plant Industry who is an expert on the culture of peanuts and who will give advice to the Laguna planters as to this substitute crop. Mr. K. B. McKinney will join the station force about the middle of February. Mr. C. H. T. Townsend, who has been inspecting the Matamoras district opposite Brownsville for pink bollworm and also made a trip of inspection between Brownsville and Tampico and the vicinity of Tampico, has returned to Washington to resume his work on diptera. Very little cotton was found between the Matamoras district and Tampico and no commercial cotton about Tampico. No pink bollworm has been found throughout this coastal strip between Matamoras and Tampico.

Two new subjects for possible quarantine action have developed during the month. One is a new corn stork-borer, *Pyrausta nubilalis* Hbn., found by the Massachusetts Experiment Station to have been introduced into New England from Europe, apparently in connection with importations of hemp brought to the



mouth of the Mystic River inasmuch as the infestation is apparently confined to nearby towns. This insect, from the extent of territory already covered and its wide range of food plants, may possibly have gotten beyond quarantine action. It is being investigated by entomologists of the Massachusetts Experiment Station in cooperation with the Bureau of Entomology of this Department. The second new importation is the banana root borer (*Cosmopolites sordidus* Germar) which has appeared near Miami, Fla. This insect has a wide range in foreign tropical countries and affects bananas and possibly, also, sugar cane. A determined effort to exterminate it in Florida is now underway in which this Department is cooperating with the State officials. A notice in relation to a quarantine against the further entry of banana roots or suckers will probably be shortly issued.

TROPICAL AND SUBTROPICAL FRUIT INSECT INVESTIGATIONS
C. L. Marlatt, Entomologist in Charge.

Ernest R. Barber, in cooperation with the Texas entomological authorities, has been extending his distribution of the lady-bird enemy of the fluted scale into southeastern Texas.

G. F. Mozzette has been spending some time recently cooperating with the Florida State authorities in determining the distribution and assisting in the extermination of the recently imported banana root borer.

Rollin LaFollette has been commissioned, effective March 1, to assist R. S. Woglum in the extension work in relation to the citrus insects in California.

A. D. Borden has spent a week or ten days inspecting for the Federal Horticultural Board the plant introduction gardens at Chico, Cal.

TRUCK CROP INSECT INVESTIGATIONS
F. H. Chittenden, Entomologist in Charge.

Chas. E. Smith, Scientific Assistant, who has been working during the growing season on truck crop insects, including insects as carriers of truck crop diseases, at Muscatine, Iowa, has been temporarily transferred to College Station, Texas, and is engaged in extension work with particular attention to the sweet-potato weevil.

Marion R. Smith, Scientific Assistant, who is engaged in similar work, specializing on insects as carriers of the mosaic and wilt of the cucumber, at Plymouth, Ind., has been temporarily transferred to Baton Rouge, La., to assist Mr. Thos. H. Jones in investigations at that station.

F. R. Cole, Scientific Assistant, has been transferred from Hood River, to Corvallis, Oregon.

E. P. Barrios, Special Field Agent, who was engaged in extension work in southern Louisiana, has resigned.

R. C. Pickett, Special Field Agent, who was engaged in extension entomology in Texas, has also resigned.

C. H. Popencoe, Entomological Assistant, is continuing his work in visiting extension workers and state officials in the Gulf Region, having spent most of his time since leaving Florida, in Texas. He is also visiting Louisiana and Mississippi.

William T. Ham, a graduate of Sanford University, and a resident of Pullman, Washington, has been appointed Special Field Agent in extension entomology for work in Washington and Oregon.

In the last news letter the statement in regard to Mr. Fink should have read: "D. E. Fink, who has been in charge of truck crop work at the Virginia Truck Experiment Station, Norfolk, Va., for several years past, will take charge of a new station to be established at Riverton, N. J."

EXTENSION ENTOMOLOGY.

J. A. Hyslop, Entomologist in Extension Work.

Up to the present date project agreements for extension work in entomology have been approved by 27 States. Projects have also been submitted for approval to 13 additional States. Formal project agreements, or amendments to existing agreements, provided for extension work in apiculture have been submitted to 20 States. Five of these projects have been formally approved and each of the remaining 15 States has indicated a desire and a need for this extension work.

The total number of men now in the field on extension work in entomology is 46, which number includes 8 research men spending part time on extension work.

CEREAL AND FORAGE INSECT INVESTIGATIONS.

W. R. Walton, Entomologist in Charge.

W. H. Larrimer, formerly attached to the West Lafayette [Indiana] field laboratory, has been granted an indefinite furlough in order to enter an Officers' training camp.

R. L. Strand has been appointed Special Field Agent in the control of insects affecting cereal and forage crops and detailed for duty in Montana. His appointment takes effect February 1, 1918.

A. H. Beyer of the Columbia [South Carolina] field station visited Washington during January for the purpose of preparing a manuscript for publication.

CONTRIBUTIONS ARE SOLICITED.

Funds are needed for knitting, surgical dressings, garment making, housing, entertainment, books, scrap books for hospitals, and war orphans. CONTRIBUTIONS ARE DESIRED FROM ALL EMPLOYEES OF THE BUREAU, BOTH IN WASHINGTON AND IN THE FIELD, ALSO FROM THEIR FAMILIES AND FROM ANYONE INTERESTED IN THE WORK.

Send your contributions to Mrs. H. S. Bishop, Bureau of Entomology, and specify, if you have any preference, to what purpose you desire the contribution to be put. NO AMOUNT IS TOO SMALL!

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